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## **Korea - Republic of**

### **Fresh Deciduous Fruit Annual**

#### **Korean Pear Industry Continues to Shrink**

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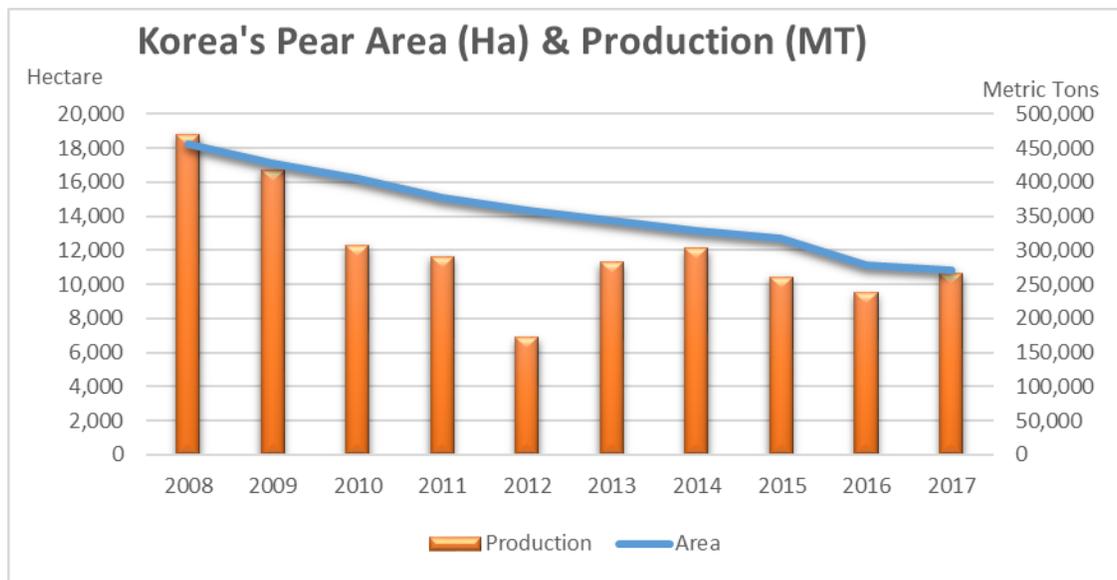
**Report Highlights:**

In marketing year 2018/2019, FAS Seoul projects that Korea's pear production will decline by close to 20 percent from the previous marketing year to 214,000 MT, because of a decrease in planted area, and lower yields due to poor weather. Responding to the decrease in supply, Korean pear consumption is also expected to drop by a similar percentage from the previous marketing year to 179,000 MT. Likewise, exports are also expected to decrease to 28,000 MT, a 12 percent decrease from the previous year.

## Planted Area

In marketing year (MY) 2018/19 (July – June), Korea’s pear planted area is projected to decrease about five percent to 10,303 hectare (ha) from the previous marketing year, continuing a trend that has been ongoing since MY 2000/01. Korea’s pear planted area has decreased about 41 percent (7,416 ha) in the past decade to 10,861 ha in MY 2017/18 from 18,277 ha in MY 2008/09. After peaking at 26,000 hectares in MY 2000/01, Korea’s pear planted area has steadily decreased, due mainly to the following ongoing factors: 1) rapid aging of the farming population, 2) rapid urbanization of pear farming areas surrounding cities and 3) farmers shifting to more profitable agricultural crops than pears.

Compared with other agricultural crops, pear farming has higher labor costs as it is more labor intensive. Therefore, many older farmers have gradually switched over to more profitable and easier to grow agricultural field crops such as soybeans, sesame seeds, or other fruits including plums, peaches, and kiwi.



Source: Ministry of Food, Agriculture and Rural Affairs (MAFRA)

As a result of the approximately 41 percent reduction (7,416 ha) of pear planted area over the past decade (MY 2008/09 – 2017/18), Korea’s fresh pear production has also decreased about 44 percent from 470,745 MT to 265,757 MT during the same period. On the other hand, the planted area and the production of other fruits to include tropical and subtropical fruits such as kiwi, mangoes, and passion fruit increased gradually during the same period. For plums, the planted area increased 27 percent to 7,324 ha in 2017 from 5,778 ha in 2008; and the area for mangoes, though still negligible, increased to 32.2 ha from 16.5 ha during the same period.

## Production

In MY 2018/19, FAS Seoul projects Korea’s pear production to decrease about 19 percent (52,000 MT) to 214,000 MT from the previous marketing year due to the following reasons: 1) an approximately five percent reduction in planted area, 2) lower yields of approximately 15 percent compared to the previous

marketing year caused by lower temperatures in the flowering season in early April and 3) a drought and heat wave during the fruit growing season in August. As a result, the Korean pear industry also forecasts a higher ratio of inferior fruits (including malformed fruits) and a decreased number of large pears per tree this year.

Meanwhile, FAS Seoul has increased Korea’s MY 2017/18 pear production to 265,757 MT, about 12 percent higher than the previous marketing year, due to favorable weather conditions throughout the year. Because of favorable weather, the 2017/18 yield reached a record high level of 2,447 Kilograms per 10 are<sup>1</sup>, which was 15 percent higher than the previous year.

Calendar Year	Singo	Wonhwang	Other	Total
2012	11,866	855	1,632	14,353
2013	11,396	819	1,525	13,740
2014	10,891	776	1,460	13,127
2015	10,544	732	1,388	12,664
2016	9,249	646	1,269	11,164
2017	9,426	525	949	10,861

Source: Korea Statistical Information Service (KOSIS)

As many Korean consumers buy fresh pears for gift-giving and for ancestral food rites during the two Korean holidays (Lunar New Year’s Day and “Chuseok,” the Korean Thanksgiving Day), the demand for the “Singo” pear, a sand pear cultivar that covers about 87% of total pear area, will not be changed in the coming years. The “Singo” pear can be stored longer than other pear cultivars, and there is a strong consumer preference for this cultivar based on its large size.

### **Consumption**

In MY 2018/19, Korea’s fresh pear consumption is projected to decrease significantly to 179,000 MT, a fall of 20 percent from the previous marketing year, mainly due to decreased pear supply that will mean higher prices. Additionally, the increased number of single-member households reduced total pear consumption, since large-sized pears are not a convenient fruit for a single person to consume and store compared to other fruits such as citrus, bananas, and grapes. Moreover, many young Korean consumers think of the pear as a kind of fruit that they enjoy only during the two traditional Korean holidays (Lunar New Year’s Day and the Korean Thanksgiving Day) or fruits for ancestral rites on a special day.

In MY 2017/18, pear consumption reached 223,100 MT, an 11 percent increase from the previous marketing year, due to increased domestic production that resulted in retail prices that were, on average, 5.7 percent lower than the previous marketing year.

<sup>1</sup> An “are” is a basic unit of area in the metric system, equal to 100 square meters and the equivalent of 0.0247 acre. So 10 “are” = 1/10 of a hectare.

Per capita consumption of fresh pears reached 9.2 kilograms in calendar year 2008, but it was gradually sliced by more than half to 4.1 percent in calendar year 2016, due to reduced demand. Per capita pear consumption is expected to decrease continuously in the coming years due to the reduction in pear farming area, and as consumer preferences for fruit shift toward different kinds of high quality fruits.

Korea: Per Capita Fruit Consumption (Unit: Kg)								
Year	Total Fruits	Apple	Pear	Peach	Grape	Persimmon	Citrus	Others
2013	59.6	9.7	5.2	3.8	6.3	3.0	13.4	18.0
2014	61.8	9.3	5.5	4.1	6.5	3.0	14.2	19.2
2015	59.8	11.4	4.7	3.0	5.7	2.9	12.5	19.6
2016	60.6	11.2	4.1	4.0	5.4	2.3	11.9	21.7
2017	61.2	10.5	4.6	4.3	4.7	2.1	11.6	23.4

Source: Ministry of Agriculture, Food and Rural Affairs (MAFRA)

### **Fruit Supply**

The size of Korea's overall fruit market increased steadily between 2000 and 2017 due to increased consumer demand for diverse and high quality fruits and fruit imports. During this period, the Korean fruit industry maintained domestic fruit production at around 2.4 million MT, while increasing quality (sugar content) and diversifying fruit varieties to meet consumer demand. Due to increased consumer demand for imported fruits facilitated by trade agreements that made more and different kinds of fruits available, Korea's fruit imports increased 157 percent to 883,000 MT in calendar year 2017 from 343,000 MT in calendar year 2000. Among the total fruit imports in calendar year 2016, bananas, oranges and pineapples accounted for 56 percent of the volume of fruit imports.

Korea's Fruit Supply By Year (Unit: 1,000MT, %)						
	2000	2008	2010	2015	2016	2017
Fruit Supply (MT)	2,745	3,252	2,808	3,102	3,154	3,192
Domestic Fruit Production (MT)	2,429	2,740	2,216	2,364	2,387	2,358
Imports (MT)	343	554	638	783	815	883
Exports (MT)	27	42	46	45	48	49
Self Sufficiency Rate (%)	88.5	84.3	78.9	76.2	75.7	73.9

Source: Korea International Trade Association (KITA) & MAFRA

Along with increased fruit imports in recent years, there has been a shift in domestically grown output on land designated for fruit production. The percentage of total fruit area planted with the six major domestic fruits (apple, citrus, peach, grape, pear and persimmon) decreased to 67 percent in 2016 from 86 percent in 2000. On the other hand, the percentage of total fruit area planted with other fruits (including tropical and subtropical fruits) increased to 33 percent from 14 percent during the same

period. This shift in which types of fruits are being produced is due to climate change (warmer weather favors different fruits), changed consumer demand, and increased demand for high quality fruits.

Korea's Production Value for Major Fruits in 2016 (Unit: KRW 1 Billion, Percent)								
Korea's Six Major Fruits	Total	Apple	Citrus	Peach	Grape	Pear	Persimmon	Others
Production Value (KRW 1 billion)	4,752	1,238	973	952	526	462	215	387
Share (%)	100	26.1	20.5	20	11.1	9.7	4.5	8.1

Source: Ministry of Food, Agriculture and Rural Affairs (MAFRA)

## **Trade**

In MY 2018/19, FAS Seoul estimates that Korea's pear exports will fall to 28,000 MT, about 12 percent (3,700 MT) lower than the previous marketing year, mainly due to a significant decrease in domestic pear production. Following reduced production, the resulting increased domestic market prices will lead more pear farmers to sell to the domestic market than export. In general, Korea exports about 10-12 percent of fresh pears out of total production.

In MY 2017/18, Korea's fresh pear exports increased significantly to 31,657 MT, about 32 percent higher than the previous marketing year, due mainly to increased domestic production caused by favorable weather throughout the year and increased demand for Korean fresh pears in Vietnam. Vietnam has experienced a "Korean Wave," in which Vietnamese consumers are demonstrating some preference for Korean fruits such as strawberries and pears for gift-giving. As a result, Korean pear exports to Vietnam increased 126 percent to 7,743 MT in MY 2017/18 from 3,432 MT in MY 2016/17. However, the United States and Taiwan are still the main export markets for Korean fresh pears, representing 36 percent and 31 percent of pear exports respectively, in MY 2017/18. Vietnam is the third-largest buyer of Korean pears, accounting for 24 percent of Korean exports in MY2017/18.

Normally, Taiwan and Vietnam import large Korean pears to use for gift-giving, while the United States imports medium-size pears. The Korean pear industry forecasts that the demand for Korean pears in Southeast Asian countries, including Vietnam, will grow steadily in coming years since consumers in this region have a strong preference for juicy fruits due to the hot climate.

## **Imports**

To date, no fresh pear imports are allowed under Korea's phytosanitary regulations.

PS&D for Fresh Pears

Pears, Fresh Market Begin Year Korea, Republic of	2016/2017		2017/2018		2018/2019	
	Jul 2016		Jul 2017		Jul 2018	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Planted	11164	11164	10860	10861	0	10303
Area Harvested	0	0	0	0	0	0
Bearing Trees	0	0	0	0	0	0
Non-Bearing Trees	0	0	0	0	0	0
Total Trees	0	0	0	0	0	0
Commercial Production	238014	238014	247300	265757	0	214000
Non-Comm. Production	0	0	0	0	0	0
Production	238014	238014	247300	265757	0	214000
Imports	0	0	0	0	0	0
Total Supply	238014	238014	247300	265757	0	214000
Fresh Dom. Consumption	204814	201847	211300	223100	0	179000
Exports	26200	26167	30000	31657	0	28000
For Processing	7000	10000	6000	11000	0	7000
Withdrawal From Market	0	0	0	0	0	0
Total Distribution	238014	238014	247300	265757	0	214000
(HA) ,(1000 TREES) ,(MT)						

## Production

Korea: Pears Production Situation 1/

Year	Area (Ha)	Production (MT)	Yield (Kg/0.1 Hectare )
2011	15,081	290,494	1,926
2012	14,353	172,599	1,203
2013	13,740	282,212	2,054
2014	13,127	302,731	2,306
2015	12,664	260,975	2,061
2016	11,164	238,014	2,132
2017	10,861	265,757	2,447
2018 2/	10,303	214,000	2,072

1/ Calendar year basis

2/ Preliminary forecast by Korea Rural Economic Institute (KREI)

Source: Korea Statistical Information Service (KOSIS)

Korea: Pear Utilization (Unit: MT) 1/

Year	Total	Fresh	Export	Processing
2013	282,212	254,443	20,210	7,559
2014	302,731	273,609	23,096	6,026
2015	260,975	228,427	22,493	10,055
2016	238,014	202,407	25,607	10,000
2017	265,757	N/A	27,157	N/A
2018 2/	214,000	N/A	28,000	N/A

1/ Calendar year basis

2/ Preliminary forecast by KREI & FAS Seoul

Source: Ministry of Agriculture, Food and Rural Affairs (MAFRA)

Korea: Pear Production as Ratio to Total Fruit Production (Unit: 1,000 MT, Ratio: Percent)

Year	Total Fruits (1,000 MT)	Pear (1,000 MT)	Ratio (%)
2011	2,102	290	13.8
2012	2,027	173	8.5
2013	2,207	282	12.8
2014	2,347	303	12.9
2015	2,364	261	11.0
2016	2,387	239	10.0
2017	2,358	266	11.3

Source: Korea Statistical Information Service (KOSIS)

Korea: Per Capita Fruits Consumption (Unit: Kg)

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2015	59.8	11.4	4.7	3.0	5.7	2.9	12.5	19.6
2016	60.6	11.2	4.1	4.0	5.4	2.3	11.9	21.7
2017	61.2	10.5	4.6	4.3	4.7	2.1	11.6	23.4

Source: Ministry of Agriculture, Food and Rural Affairs (MAFRA)

Korea: Monthly Korean Pear Exports (Unit: MT)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
'18	5,126	2,029	2,533	1,411	543	118	17	3,016	-	-	-	-
'17	2,980	1,964	1,450	537	317	13	0	3,127	4,675	3,742	4,583	3,769
'16	3,167	1,180	1,225	378	493	257	1	3,847	2,866	4,584	3,708	3,900
'15	3,219	686	1,627	322	148	64	68	1,977	2,379	4,707	3,562	3,748
'14	2,693	1,322	1,333	371	87	20	2	3,359	1,719	4,608	3,514	4,068
'13	525	209	615	68	19	30	0	1,619	2,645	5,057	4,073	5,260

Source: Korea Customs Service & Korea International Trade Association

Korea: Monthly Average Foreign Exchange Rate  
(Unit: Korean Won / 1US\$)

Month	2016	2017	2018
Jan.	1201.67	1134.40	1066.70
Feb.	1217.35	1144.92	1079.58
Mar.	1188.21	1134.77	1071.89
Apr.	1147.51	1132.73	1067.76
May	1171.51	1125.28	1076.39
Jun.	1170.50	1130.04	1092.80
Jul.	1144.09	1134.40	1122.80
Aug.	1111.68	1130.79	1121.15
Sep.	1107.49	1131.59	1120.60
Oct.	1125.28	1131.57	-
Nov.	1161.64	1105.04	-
Dec.	1172.24	1085.78	-

Source: Industrial Bank of Korea

## Trade Matrix

### Export Matrix for Korean Pears (Sand Pears)

Export Trade Matrix						
Country: Korea						
Commodity: Commodity: Fresh Pears (HS 0808.30)				Unit: MT & US\$1,000		
Exports to	MY 2015/16 (July 15 – June 16)		MY 2016/17 (July 16 – June 17)		MY 2017/18 (July 17 – June 18)	
Country	Volume	Value	Volume	Value	Volume	Value
U.S.	9,265	25,323	10,686	30,528	11,487	32,955
Taiwan	9,986	24,635	9,742	22,095	9,713	21,151
Hong Kong	465	959	588	1,165	732	1,509
Vietnam	1,313	2,712	3,432	6,989	7,741	14,002
All Others	2,098	5,586	1,719	4,421	1,984	5,126
<b>Grand Total</b>	<b>23,127</b>	<b>59,215</b>	<b>26,167</b>	<b>65,198</b>	<b>31,657</b>	<b>74,743</b>

Source: Korea Customs Service & Korea International Trade Association

## Price

Korea: Average Retail Prices for Korean “Singo” Pear (Sand pear), Nationwide  
(Unit: Korean Won per 10 Fruits)

Month	High Quality		Medium Quality	
	CY 2017	CY 2018	CY 2017	CY 2018
Jan.	30,457	28,309	19,157	18,051
Feb.	30,095	28,168	19,645	19,138
Mar.	31,707	27,664	18,756	19,010
Apr.	32,082	28,033	19,211	19,056
May	32,862	28,201	19,401	18,714
Jun.	36,960	28,006	25,120	19,157
Jul.	38,743	28,594	29,691	19,300
Aug.	37,497	28,312	29,012	19,999
Sep.	30,752	31,270	21,513	23,514
Oct.	29,240	-	19,275	-
Nov.	26,518	-	16,832	-
Dec.	27,540	-	17,254	-

Source: Korea Agro-Fisheries & Food Trade Corporation (aT)

Korea: Average Wholesale Prices for Korean “Singo” Pear (Sand pear), Nationwide  
 (Unit: Korean Won per Kilogram)

Month	High Quality		Medium Quality	
	CY 2017	CY 2018	CY 2017	CY 2018
Jan.	2,653	2,358	2,258	1,994
Feb.	2,639	2,607	2,228	2,230
Mar.	2,731	2,603	2,331	2,220
Apr.	2,791	2,549	2,391	2,169
May	2,960	2,417	2,547	2,043
Jun.	3,291	2,483	2,858	2,091
Jul.	3,848	2,341	3,363	1,935
Aug.	3,736	2,336	3,230	1,944
Sep.	3,046	3,167	2,672	2,769
Oct.	2,540	-	2,206	-
Nov.	2,258	-	1,911	-
Dec.	2,234	-	1,888	-

Source: Korea Agro-Fisheries & Food Trade Corporation (aT)